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- (54) Cleansing composition
- (57) A cleansing composition for skin and body comprises:

(A) a nonionic surfactant represented by the following formula (I) and having an HLB value of not less than 3 and less than 8:

wherein R¹ represents a hydrogen atom or a saturated or unsaturated straight-chain hydrocarbon group containing from 1 to 8 carbon atoms; x represents a number of from 1 to 30; y represents a number of from 0 to 30, and

(B) one or more surfactants from anionic surfactants, amphoteric surfactants and sugar surfactants.

enthält PO Makeup entferner, Løslichtent resuntleln

### CLEANSING COMPOSITION

### FIELD OF THE INVENTION

The present invention relates generally to detergent compositions and more particularly to a face and body care cleansing composition having high cleansing and foaming activity with respect to residues of makeup cosmetics such as rouge, foundations, etc., and other greasy soil due to sebum and the like. The composition provides a comfortable feeling to the skin and hair with a minimum of irritation.

## BACKGROUND OF THE INVENTION

Makeup residues originating from rouge, foundations, eye-shadows, mascaras, etc., contain large amounts of grease or solid oils and cannot be effectively removed with cleansing foams which are based on ordinary soaps which have inadequate solubilizing and emulsifying effects. Therefore, makeup residues are usually removed with cleansing creams, cleansing oils or cleansing gels, all of which contain some oleaginous base.

On the other hand, in pimples and other skin conditions involving inflammation which is induced by deposition and solidification of fat, keratic protein, etc., within the pores of the skin, ordinary cleansing preparations are not powerful enough to wash off the solid soil clogging the pores of the skin and, therefore, it is a common practice to employ keratolytic agents such as salicylic acid or sulfur in conjunction.

Conventional fatty acid soaps and cleansing preparations based on anionic surfactants are, thus, not sufficiently effective to remove obstinate greasy materials such as makeup residues, dirt, sebum and other solid fats and conventional cleansing creams and the like are disadvantageous in that when used in high temperature, high humidity environment such as in bathrooms, the stability of emulsions is adversely affected by admixing of water to detract from their cleansing power or to cause separation thereof.

Therefore, a face and body care cleansing composition free of the above-mentioned drawbacks and yet having high cleansing and foaming activity and which is less irritating and more comfortable to the skin and hair has been demanded in the art.

## SUMMARY OF THE INVENTION

The inventors of the present invention conducted intensive studies to meet the above demand and found that by employing a specific nonionic surfactant in combination with a surfactant selected from the group consisting of anionic, amphoteric and sugar nonionic surfactants, there can be obtained a cleansing composition which has high cleansing and foaming powers with respect to greasy material is less irritating to the skin, gives a refreshing sensation, and remains stable even in a high humidity environment. The present invention is obtained by the above finding.

The present invention relates to a cleansing composition comprising:

(A) a nonionic surfactant represented by the following formula (I) and which has an HLB value of not less than 3 and less than 8:

$$R^{1}$$
-O-(CH<sub>2</sub>CHO) $_{x}$ -(CH<sub>2</sub>CH<sub>2</sub>O) $_{y}$ -H  
CH3

wherein R<sup>1</sup> represents a hydrogen atom or a saturated or unsaturated straight-chain hydrocarbon group containing from 1 to 8 carbon atoms; x represent a number of from 1 to 30; y represents a number of from 0 to 30, and

(B) one or more surfactants selected from the group consisting of anionic surfactants, amphoteric surfactants and sugar nonionic surfactants.

## DETAILED DESCRIPTION OF THE INVENTION

Component (A) according to the invention is a nonionic surfactant of formula (I) (hereinafter referred to as compound (I)), wherein R<sup>1</sup> is a hydrogen atom or a saturated or unsaturated straight-chain hydrocarbon group containing from 1 to 8 carbon atoms. In terms of foaming power and feeling in use, R<sup>1</sup> is preferably a C<sub>1-6</sub> straight-chain alkyl group such as methyl, ethyl, butyl, propyl, pentyl or hexyl group. Referring further to formula (I), x which represents the number of moles of propylene oxide added

and y which represents the number of moles of ethylene oxide added are from 1 to 30 and from 0 to 30, respectively, and, in terms of foaming power and feeling in use, are preferably from 3 to 30 and from 2 to 10, respectively, more preferably from 3 to 10 and from 2 to 7, respectively.

It is essential that the HLB value of compound (I) not be less than 3 and be less than 8. The HLB value is a value given by the following formula of Oda, Teramura et al. as described, for example, in <a href="Kagaku-no-Ryoiki">Kagaku-no-Ryoiki</a>, vol. 11, No. 10, pp 719-725 (1957).

$$HLB = \frac{\Sigma \text{ Inorganicity}}{\Sigma \text{ Organicity}} \times 10$$

If the HLB value of compound (I), which is a nonionic surfactant, is less than 3, the compound will be too hydrophobic and oleaginous, with a marked decrease in foaming power. On the other hand, if the HLB value is 8 or more, the composition will be too hydrophilic with a consequent decrease in the cleansing and emulsifying activity with respect to greasy makeup materials. Thus, the HLB value of this nonionic surfactant should be at least 3 and less than 8, and is preferably in the range of from 4.5 to 7.5.

Component (B) according to the invention include, for example, fatty acid surfactants, alkyl ether carboxylic acid surfactants, alkyl sulfate surfactants, polyoxyethylene alkyl ether sulfate surfactants, phosphoric ester surfactants, N-

acylamino acid surfactants, isethionate surfactants, sulfosuccinate surfactants, amidoamine surfactants, betaine surfactants, sugar ether surfactants, sugar amide surfactants and sugar ester surfactants.

With regard to the anionic surfactant used as component (B) of the invention, consideration of foaming power favors the use of surfactants of the fatty acid surfactants, alkyl ether carboxylic acid surfactants, alkyl sulfate surfactants, polyoxyethylene alkyl ether sulfate surfactants, phosphoric ester surfactants, N-acylamino acid surfactants, isethionate surfactants or sulfosuccinic acid surfactants. These types of surfactants may be used alone or in combination. Among these anionic surfactants, the phosphoric ester surfactants, N-acylamino acid surfactants, isethionate surfactants and sulfosuccinic acid surfactants are particularly preferred from the view of low irritancy.

Referring to the fatty acid surfactants and alkyl sulfate surfactants for component (B), those having a straight-chain or branched  $C_{8-20}$  alkyl chain, whether saturated or unsaturated, and an alkali metal or alkanolamine as the counter ion are preferred.

With regard to the alkyl ether carboxylic acid surfactants and polyoxyethylene alkyl ether sulfate surfactants, those having an alkyl chain and a counter ion as mentioned above, and having 1 to 4 moles of ethylene oxide on the average present, are preferred.

The phosphoric ester surfactants for component (B) include, for example, compounds of the following formula (II) or (III):

$$\begin{array}{c}
O \\
\mathbb{R}^2 - (OCH_2CH_2)_{\mathsf{T}} - O - P - OM \\
\downarrow \\
OZ
\end{array} (II)$$

$$R^3$$
— $(OCH_2CH_2)_{m}O$   $O$   $P$   $(III)$   $R^4$ — $(OCH_2CH_2)_{m}O$   $OZ$ 

wherein R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> each represents a straight-chain or branched alkyl or alkenyl group which can each contain from 8 to 18 carbon atoms; Z and M each represents a hydrogen atom, an alkali metal (e.g., Na, K), an ammonium group or an alkanolamine having a hydroxyalkyl group of from 2 to 3 carbon atoms (e.g., triethanolamine); and 1, m and n each represents a number of from 0 to 10.

Preferred among these compounds (II) or (III) are compounds in which the number of moles of added ethylene oxide ranges from 0 to 3 and the most advantageous are compounds having no ethylene oxide units but having  $C_{12-14}$  alkyl groups. Thus, sodium mono- or dilauryl phosphate, potassium mono- or dilauryl phosphate, diethanolamine mono- or dilauryl phosphate, triethanolamine mono- or dilauryl

phosphate, sodium mono- or dimyristyl phosphate, potassium mono- or dimyristyl phosphate, diethanolamine mono- or dimyristyl phosphate, triethanolamine mono- or dimyristyl phosphate, etc., may be mentioned by way of example.

When compounds (II) and (III) are used in combination as component (B), the ratio of (II) to (III), by weight, is preferably in the range of from 10:0 through 5:5, more preferably from 10:0 through 7:3.

In the category of component (B) according to the invention, the N-acylamino acid surfactants include, for example, compounds of formula (IV):

wherein R<sup>5</sup> represents a straight-chain or branched alkyl or alkenyl group each containing from 7 to 21 carbon atoms; R<sup>6</sup> represents a hydrogen atom or an alkyl or alkenyl group each containing from 1 to 4 carbon atoms; R<sup>7</sup> represents a group of the formula -(CH<sub>2</sub>)<sub>p</sub>R<sup>8</sup> (where p represents an integer of from 0 to 4; R<sup>8</sup> represents a hydrogen atom, a hydroxyl group or -COOM<sup>2</sup> where M<sup>2</sup> means hydrogen, an alkali metal (e.g., Na, K) or an alkanolamine (e.g., triethanol-amine)).

Compounds of the above formula (IV) may be L-configured, D-configured or racemic, and any of these isomers

can be employed. Preferred specific examples include N-lauroylglutamic acid, N-myristylglutamic acid, N-lauroyl-N-methylglycine, N-lauroylaspartic acid, N-lauroylserine, etc., inclusive of the corresponding alkali metal (e.g., Na, K) salts and alkanolamine (e.g., triethanolamine) salts.

In the category of compound (B), isethionate surfactants include, for example, compounds of formula (V):  $R^{8'}-\text{COOCH}_2\text{CH}_2\text{SO}_3\text{M}^3 \tag{V}$ 

wherein R<sup>8</sup>' is an alkyl or alkenyl group each containing from 7 to 21 carbon atoms; M<sup>3</sup> is a hydrogen atom, an alkali metal (e.g., Na, K) or a cationic group derived from an alkanolamine (e.g., triethanolamine).

In the compounds of formula (V), the fatty acid residue R<sup>8</sup>'-COO- may, for example, be the residue of lauric acid, myristic acid, oleic acid, coco fatty acid or the like and the counter cation M<sup>3</sup> may for example be potassium, sodium, triethanolamine, diethanolamine, monoethanolamine or the like.

In the category of compound (B) according to the invention, sulfosuccinate acid surfactants include, for example, sulfosuccinic esters of higher alcohols or the corresponding ethoxylates thereof, which are represented by formula (VI) or (VII):

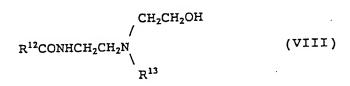
wherein R° represents  $R^{10}O-(CH_2CH_2O)_q$  or  $R^{11}CONH-(CH_2CH_2O)_q$  (where  $R^{10}$  represents a straight-chain or  $C_{8-22}$  branched  $C_{8-22}$  alkyl or  $C_8-C_{22}$  alkenyl group;  $R^{11}$  represents a straight-chain or branched  $C_{7-21}$  alkyl or  $C_7-C_{21}$  alkenyl group; q represents a number of from 0 to 20);  $M^4$  represents a hydrogen atom or a water soluble salt-forming cation selected from the group consisting of alkali metals (e.g., Na, K), alkaline earth metals, ammonium and organoammonium (e.g., triethanolamine, diethanolamine, monoethanolamine) ions,

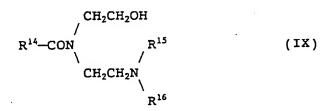
and sulfosuccinic esters derived from higher fatty acid amides.

Among the sulfosuccinic esters of higher alcohols or ethoxylates thereof, which are represented by formula (VI) or (VII). These are the disodium salts of sulfosuccinic esters of secondary alcohol ethoxylates containing from 11 to 13 carbon atoms (e.g., Nippon Shokubai Kagaku Kogyo Co., Ltd.,

Softanol MES-3, 5, 7, 9 and 12; each numeral represents the number of moles of ethylene oxide (EO) added), disodium salts of sulfosuccinic esters of lauryl alcohol or lauryl alcohol ethoxylates (EO = 3, 6, 9 and 12), and disodium salts of sulfosuccinic esters of synthetic primary alcohols (primary alcohols derived form petroleum) which contain from 12 to 15 carbon atoms or the corresponding ethoxylates (EO = 2 - 4). As sulfosuccinic esters derived from higher fatty acid amides, there may be mentioned disodium salts of sulfosuccinic ester of polyethylene glycol (EO = 1, 2) laurylamide, sodium salts of sulfosuccinic ester of polyethylene glycol (EO = 4) coco fatty acid.

In the category of component (B) according to the invention, amidoamine surfactants include, for example, amidoamine amphoteric surfactants of the following formula (VIII) or (IX):





wherein R<sup>12</sup> and R<sup>14</sup> each represents a saturated or unsaturated hydrocarbon group containing from 7 to 19 carbon atoms; R<sup>13</sup> and R<sup>15</sup> each represents -CH<sub>2</sub>COOM<sup>5</sup>, -CH<sub>2</sub>CH<sub>2</sub>COOM<sup>5</sup> or -CH<sub>2</sub>CHCH<sub>2</sub>SO<sub>3</sub>M<sup>5</sup> (where M<sup>5</sup> represents OH

a hydrogen atom, an alkali metal or an alkanolamine);

R<sup>16</sup> represents a hydrogen atom or a group of the

formulae -CH<sub>2</sub>COOM<sup>5</sup>, -CH<sub>2</sub>CH<sub>2</sub>COOM<sup>5</sup> or-CH<sub>2</sub>CH-CH<sub>2</sub>SO<sub>3</sub>M<sup>5</sup>
OH

(where M<sup>5</sup> has the meaning defined above).

These amphoteric surfactants, also known as imidazoline surfactants, are commercially available under the trademarks of Miranol (a product of Miranol), Softazolin (a product of Kawaken Fine Chemicals), etc.

In the category of component (B) according to the invention, betaine surfactants include, for example, hydroxysulfobetaine, trialkylaminoacetate (betaine), and trialkylaminopropanesulfobetaine surfactants which may be represented by the following formulae (X), (XI) and (XII), respectively:

$$R^{18}$$
 $R^{17}$ 
 $-N^{+}$ 
 $-CH_{2}CH$ 
 $-CH_{2}$ 
 $-SO_{3}^{-}$ 
 $X$ 
 $X$ 
 $X$ 
 $X$ 

wherein R<sup>17</sup> represents a saturated or unsaturated hydrocarbon group containing from 8 to 18 carbon atoms; and R<sup>18</sup> and R<sup>19</sup> each represents methyl or ethyl group;

$$R^{21}$$
|
 $R^{20}$ — $N^{\pm}$ — $CH_{2}COO^{-}$ 
|
 $R^{22}$ 

wherein  $R^{20}$  represents a hydrocarbon group having an average number of carbon atoms in the range of from 10 to 16; and  $R^{21}$  and  $R^{22}$  each represents a lower alkyl group containing from 1 to 3 carbon atoms;

$$R^{24}$$
|
 $R^{23}$ -N+-CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>SO<sub>3</sub>-
|
 $R^{25}$ 
(XII)

wherein  $R^{23}$  represents a saturated hydrocarbon group having an average number of carbon atoms in the range of from 10 to 16; and  $R^{24}$  and  $R^{25}$  each represents a lower alkyl group containing from 1 to 3 carbon atoms.

Among the compounds of formulae (X) through (XII),

the compounds in which  $R^{17}$ ,  $R^{20}$  or  $R^{23}$  is a  $C_{12}$  hydrocarbon group and  $R^{18}$  and  $R^{19}$ ,  $R^{21}$  and  $R^{22}$ , or  $R^{24}$  and  $R^{25}$  are methyl are particularly preferred.

In the category of component (B) according to the invention, sugar ether surfactants include alkylsaccharide surfactants of the following formula (XIII):

$$R^{26}-O-(R^{27}O)_{\overline{r}}G_{r}$$
 (XIII)

wherein  $R^{26}$  represents a straight-chain or branched alkyl or alkenyl group each containing from 6 to 18 carbon atoms or an alkylphenyl group containing from 7 to 18 carbon atoms;  $R^{27}$  represents a  $C_{2-4}$  alkylene group; G represents a reducing sugar containing from 5 or 6 carbon atoms; r represents a number of from 0 to 10; and t represents a number of from 1 to 10.

Particularly advantageous are decyl glucoside, lauryl glucoside, lauryl polyglucoside and decyl polyglucoside.

In the category of component (B) according to the invention, sugar amide surfactants include compounds of the following formula (XIV):

$$\begin{array}{c|c}
R^{28} & C & -N & -A \\
\parallel & \mid & \\
O & R^{29}
\end{array} (XIV)$$

wherein  $R^{28}$  represents a straight-chain or branched alkyl or alkenyl group each of which have from 5 to 17 carbon atoms or an alkylphenyl group which have from 7 to 18 carbon atoms;  $R^{29}$  represents a hydrogen atom, a straight-chain or branched

alkyl or alkenyl group each of which have from 1 to 18 carbon atoms, or groups of the formulae  $\frac{-(CH_2CHO)_{+}-H}{R^{30}}$  (where  $R^{30}$ 

represents hydrogen or methyl; and v represents a number of from 0 to 10), -CH<sub>2</sub>-CH<sub>2</sub>-OH, -CH<sub>2</sub>-CH-CH<sub>3</sub> or -CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH; and OH

A represents a polyhydroxyalkyl group composed of a sugar residue containing from 4 to 30 carbons (e.g., a residue of a mono- or oligosaccharide composed of 1 to 10 residues of a sugar such as glucose, fructose or galactose).

In the category of component (B) according to the invention, sugar ester surfactants include esters of a fatty acid containing from 7 to 21 carbon atoms with a mono- or oligosaccharide composed of 1 to 10 sugar residues (e.g., residues of glucose, galactose, etc.), such as sucrose fatty acid ester surfactants.

The above-mentioned types of component (B) can be used either alone or in combination of two or more of them.

The combined proportion of components (A) and (B) in the cleansing composition of the present invention is preferably form 5 to 90% by weight and more preferably in the range of from about 20 to 60% by weight, based on the total weight of the cleansing composition. The weight ratio of (A)/(B) can be freely chosen within the range of 1/9 through 9/1, although the range of 1/9 through 4/6 is preferred.

The cleansing composition of the present invention

can be prepared and provided in optional application forms, e.g., as a solid, paste, liquid and other preparations.

In addition to the aforementioned surfactants, the cleansing composition of the invention may contain any of the conventional cleanser additives, such as viscosity modifiers and conditioning agents, e.g., anionic polymers, nonionic polymers, cationic polymers, etc.; and humectants, e.g., glycerol, sorbitol, etc., as well as preservatives, ultraviolet absorbers, perfumes, colors, etc., all in proportions not detrimentally affecting the effects of the invention.

The following examples are intended to illustrate the present invention in further detail and should by no means be construed as defining the metes and bounds of the invention.

### EXAMPLE 1

A series of cleansing compositions were prepared in accordance with the compositions shown in Table 1 and their performance characteristics were evaluated by the methods set forth below. The results are presented in Table 1.

- (1) Cleansing power test (sebum soil test):
  - (A) Soiled fabric:
    - (a) Preparation of an artificially soiled fabric:

An artificial greasy soil composed of triglycerides, paraffins, fatty acids and carbon black was evenly dispersed in a solvent (chloroform) and a cotton fabric was caused to contact the dispersion and then dried, whereby the artificial

greasy soil was uniformly deposited on the fabric. From this fabric,  $10\ \text{cm}\ \text{x}\ 10\ \text{cm}$  testpieces were prepared and tested.

# (b) Washing method and conditions:

water (4°DH) at a final concentration of 3% by weight and made up to 500 ml. The artificially soiled fabric, in groups of 5 sheets, were agitated in the solution at 30°C by means of a tergotometer at 100 rpm for 5 minutes and then rinsed in running water. After pressing with an iron, the reflectance values of the fabric were measured to calculate the detergency rate. The data were evaluated according to the criteria presented below.

# (B) Pig skin test (makeup soil test):

Rouge was uniformly coated on a circular area, 1 cm in diameter, of a pig skin (2 cm x 2 cm) and 30 minutes later 5 drops of a 20% by weight aqueous solution of the test cleansing composition were dripped on the coated area. The treated skin area was massaged with a flat glass bar for 20 seconds, rinsed in running water (2½/min., 1 minute) and dried. Using hexane, the residual rouge was then extracted from the pig skin and the ultraviolet absorbance of the hexane solution was detected to thereby determined the detergency rate. The data were evaluated according to the following criteria.

Evaluation criteria:

A: 80% or more

B: from 70% to less than 80%

C: from 60% to less than 70%

D : less than 60%

### (2) Organoleptic test:

A panel of 7 experts was asked to appropriately dilute and foam the test cleansing composition with tap water, wash their hands and faces with the foam and rate the composition.

### A. Foam criteria:

A : Copious foaming and creamy

B : Ordinary

C : Slightly poor foaming

D : Poor foaming

### B. Feeling-after-use criteria:

A: Refreshed, moist or not pulling

B : Ordinary

C : Not refreshed, not moist, pulling

		Prod	uct	of t	Product of the Invention	ven	ion	١					Comp	arat	Comparative Product	rodu	lt	١			١	
Cleansing Composition:	-1 €.	(*)	ml#	410	را هالت	918	<u>~[#</u>	æI€	1 <del></del>	~i@	ml 🗭	41%	£]22	91€	<u>~</u> (€)	∞1€	01 <u>%</u>	의근	∓l€	<b>3</b>   12	E   6	
Triethanolamine mono- lauryl phosphate (MAP)	20	1	ı	1	20	1	ŧ	1	30	1	1	1	20	1	1	1	1	. 50	ı	1	. ,	
Triethanolamine N- lauroylglutamate (AGS)	1	20	t	1	1	20	ι	1	1	30	1	ī	τ	20	ı	1	1	· t	20	1	1	
Sodium cocoylise- thionate (SCI)	•	1	20	1	1	. 1	20	1	ı	4	30	1	ı	1	20	1	t	1	1 .	20	1	
Disodium monolauryl sulfosuccinate (SS)	1	ı	1	20	1	1	ı	20	1	i	ı	30	ı	1	1	20	t	1	ı	ı	20	
Polyoxypropylene (7)- polyoxyethylene (3) butyl ether (HLB: 7.5)	10	. 01	10	10	1	1	1	1	1	ı	1		1	1	. 1	t	10	t	ŧ	t	ı	
Polyoxypropylene (15)- poluyoxyethylene (3) butyl ether (HLB: 5.2)	1	ı	t	1	10	10	70	10	ı	1	1	1	t	,	ŧ	1	1	1	. 1	1	ı	
Polyoxypropylene (5)- poluyoxyethylene (10) butyl ether (HLB: 8.8)	1	ı	•	1	1	. 1	1	t	r	1	t	1	10	10	10	10	1	1	1	1	1	•
Polyoxyethylene (5) oleyl ether (HLB: 7.5)	. 1	1	1	1	1	1	1	1	1	1.	١.	1	ı	1	1	1	1	<b>2</b> :	10	10	10	
Triethanolamine laurate	1	ı	1	ı	t	t	ı	1	ı	1	1	ı	ı	1	i	ı	20	1	ı	. 1 .	ı	
Purified Water	Bal-	Bal	Ball anc	- Bal	Bal.	Bal.	Ball anc	Bal-	Bal.	Bal-	Bal-	Bal-	Ball	Bal.	Bal-	Bal-	Bal- Bal- Bal- Bal- Bal- Bal- Bal- Bal-	Bal-	Bal-	Bal- ance	Bal- ance	

TABLE 1 (cont'd

		Prod	Product of the Invention	of t	he I	nven	ion	1					Compa	rati	ve P	Comparative Product	t;				1
	니송	218	mlæ	<b>का</b> €	ر اه	9(%)	7 (%)	∞1∞	<b>−1</b> €0	~i <del>%</del>	m1 <del>@</del>	41%	δ! <u>%</u>	918	<b>~</b>  €	æ1æ	ol⊛	의 %	=10	(%)	(%) (%)
cleansing Power:																				1	1
Sebum dirt	В	œ	Ø	m	£Ω	Ø	m	æ	Ω	۵	Ω	Ω	ပ	U	Ü	ပ	Д	Ω	۵	۵	Ω
Makeup dirt	, д	Ω	æ	B	æ	Ø	m	Ø	Ω	۵	Ω	۵	ပ	ပ	ပ	ပ	æ	۵	ပ	ပ	ပ
Organolaptic test:										•					•						
Foam	Ą	Ø	æ	A	<b>A</b>	<b>4</b>	<	4	ပ	ပ :	m	œ	æ	ш	Ø	m	£	۵	۵	Q	Ω
Feeling of skin after cleansing:		•																			
Refreshed	р	æ	Ø	Ω	æ	Ø	Ø	B	Д	ပ	ပ	ပ	n	æ	Ф	120	Ø	Ω	۵	۵	۵
Moist	Ø	æ	Ø	9	æ	B	Ø	Ø	ပ	Ø	ပ	m	ပ	ပ	ပ	υ	۵	m	ပ	ပ	ပ
Pulling	Ø	Ø	EQ.	Ø	æ	œ	Ø	8	Ø	ပ	ပ	Ů.	ធ	B	Ø	В	Ω	Ø	Ø	æ	۵

Note: all percents given in Table 1 above are by weight based on the total weight of the composition.

# EXAMPLE 2 (a facial cleanser)

		(% by weight)
(1)	Ditriethanolamine lauryl- phosphate	3
(2)	Polyoxypropylene (11)-polyoxy- ethylene (4) butyl ether (HLB 7.2)	12
(3)	Ethylene glycol distearate	3
(4)	Methylparaben	0.3
(5)	Perfume	0.3
(6)	Purified water	Balance
	Ingredients (1) through (3) were diss	solved in heated
water (	6) and cooled, followed by the addition	on of (4) and (5)
to prov	vide a facial cleanser.	

The above cleanser could be used for removing makeup and for face cleansing as well. It produced a copious foam and left the washed face refreshed and provided no feeling of taut skin (pulling sensation).

# EXAMPLE 3 (a facial cleanser)

	•	(% by weight)
(1)	Monotriethanolamine N-lauroylglutamate	35
(2)	Polyoxypropylene (7)-polyoxyethylene (3) propylene ether (HLB 5.4)	15
(3)	Ethylene glycol distearate	. 3
(4)	Triethanolamine polyacrylate (Carbopol 941, a product of Goodrich)	0.5
(5)	Triclosan	0.2

(6)	Ethanol	5
(7)	Perfume	0.5
(8)	Water	Balance

Ingredients (1) through (5) were dissolved in heated water (8) and cooled, followed by the addition of (6) and (7) to provide a facial cleansing preparation.

This facial cleanser could be used for removing makeup and for face cleansing as well. It produced a copious foam and left the skin refreshed and moist.

# EXAMPLE 4 (a facial cleanser)

		(% by weight)
(1)	Sodium cocoylisethionate	15
(2)	Disodium monolauryl sulfosuccinate	15
(3)	Lauric acid	3
(4)	Polyoxypropylene (15)-polyoxyethylene (3) hexyl ether (HLB 5.8)	6
(5)	Ethylene glycol distearate	3
(6)	Dibutylhydroxytoluene	0.2
(7)	Oxybenzone	0.2
(8)	Cationized cellulose (Polymer JR400, a product of U.C.C.)	0.2
(9)	Perfume	0.3
(10)	Purified water	Balance
	Ingredients (1) through (8) were disso	olved in heated
water	(10) and cooled, followed by the addition	on of (9) to

provide a facial cleanser.

This cleanser could be used for removing makeup and for face cleansing as well. It produced a copious foam and left the skin refreshed and moist.

<u>EXAMPLE 5</u> (a shampoo)	
	(% by weight)
Laurylglycoside	20.0
Cocoimidazolinium betaine	2.0
Hydroxyethylcellulose	0.5
Polyoxyethylene (EO 100) distearate	2.0
Ethylene glycol distearate (HLB 6.81)	2.0
Yellow No. 4	trace
Polyoxypropylene (11)-polyoxyethylene (4) hexyl ether	5.0
Purified water	Balance

It is apparent that the cleansing composition of the present invention is able to remove obstinate greasy soil such as makeup residues and soil due to sebum, has a high foaming power and insures a good feeling in use without an irritating action on the skin.

While the invention has been described in detail and with reference to specific embodiments thereof, it will be apparent to one skilled in the art that various changes and modifications can be made therein without departing from the spirit and scope thereof.

#### Claims:

- 1. A cleansing composition comprising:
- (A) a nonionic surfactant represented by the following formula (I) and having an HLB value of not less than 3 and less than 8:

$$R^{1}$$
-O-(CH<sub>2</sub>CHO) $_{\overline{x}}$ -(CH<sub>2</sub>CH<sub>2</sub>O) $_{\overline{y}}$ -H

(I)

CH3

wherein R<sup>1</sup> represents a hydrogen atom or a saturated or unsaturated straight-chain hydrocarbon group containing from 1 to 8 carbon atoms; x represents a number of from 1 to 30; y represents a number of from 0 to 30, and

- (B) one or more surfactants selected from the group consisting of anionic surfactants, amphoteric surfactants and sugar nonionic surfactants.
- 2. A cleansing composition according to claim 1 wherein the sum of components (A) and (B) ranges from 5 to 90% by weight based on the total weight of the composition and the weight ratio of component (A) to component (B) is in the range of 1/9 through 9/1.
- 3. A cleansing composition according to claim 1 wherein component (B) is one or more surfactants selected from the group consisting of fatty acid surfactants, alkyl ether carboxylic acid surfactants, alkyl sulfate surfactants, polyoxyethylene alkyl ether sulfate surfactants, phosphoric

ester surfactants, N-acylamino acid surfactants, isethionate surfactants, sulfosuccinate surfactants, amidoamine surfactants, betaine surfactants, sugar ether surfactants, sugar amide surfactants and sugar ester surfactants.